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### NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

09/18/2008

Lynn L. Augspurger IBM Corporation 2455 South Road, P386 Poughkeepsie, NY 12601 EXAMINER

PARIKH, KALPIT

ART UNIT

PAPER NUMBER

2187

DATE MAILED: 09/18/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/603,251      | 06/25/2003  | Thomas J. Heller JR. | POU920020123US1     | 3683             |

TITLE OF INVENTION: MULTIPROCESSOR SYSTEM WITH DYNAMIC CACHE COHERENCY REGIONS

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1440        | \$300               | \$0                  | \$1740           | 12/18/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

#### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where n

| appropriate. All further indicated unless correcte maintenance fee notifica   | ed below or directed oth  | ng the Patent, advance on<br>the derwise in Block 1, by (a | rders and notification of<br>a) specifying a new corr  | maintenance fees respondence address   | will be<br>; and/or                                    | mailed to the current or (b) indicating a separ   | correspondence address as<br>rate "FEE ADDRESS" for  |
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| CURRENT CORRESPOND  | ENCE ADDRESS (Note: Use Bl  | , ,  | Fe<br>pa   | ee(s) Transmittal. Th<br>pers. Each addition   | iis certif<br>al paper                                 | ficate cannot be used fo  | domestic mailings of the<br>or any other accompanying<br>it or formal drawing, must  |
| Lynn L. Augsp<br>IBM Corporation<br>2455 South Roam   | ourger<br>n<br>d, P386  | 72008  | I I<br>St<br>ad<br>tra   | Ce<br>hereby certify that the<br>ates Postal Service<br>Idressed to the Ma<br>ansmitted to the USI | rtificate<br>nis Fee(<br>with suf<br>il Stop<br>TO (57 | e of Mailing or Transn<br>(s) Transmittal is being<br>fficient postage for first<br>ISSUE FEE address<br>(71) 273-2885, on the da | nission deposited with the United class mail in an envelope above, or being facsimile te indicated below.                          |
| Poughkeepsie, N   | NY 12601  |  |  |  |  |   | (Depositor's name)   |
|   |   |  | _  |  |  |   | (Signature)  |
|   |   |  | L  |  |  |   | (Date)   |
| APPLICATION NO.   | FILING DATE   |  | FIRST NAMED INVENTO  | )R   | ATTO   | DRNEY DOCKET NO.  | CONFIRMATION NO.   |
| 10/603,251  | 06/25/2003  |  | Thomas J. Heller JR.   |  | PO   | 0U920020123US1  | 3683   |
| TITLE OF INVENTION  |   |  |  |  |  |   |  |
| APPLN. TYPE   | SMALL ENTITY  | ISSUE FEE DUE  | PUBLICATION FEE DUI  |  | JE FEE   | TOTAL FEE(S) DUE  | DATE DUE   |
| nonprovisional  | NO  | \$1440   | \$300  | \$0<br><b>¬</b>  |  | \$1740  | 12/18/2008   |
| EXAM  |   | ART UNIT   | CLASS-SUBCLASS   | _  |  |   |  |
| PARIKH,  1. Change of corresponde   |   | 2187   | 711-141000  2. For printing on the   |  |  |   |  |
| ☐ "Fee Address" ind   | ondence address (or Cha<br>B/122) attached.<br>ication (or "Fee Address'<br>)2 or more recent) attach | ' Indication form  | registered attorney or agent) and the names of up to   |  |  |   |  |
| recordation as set fort (A) NAME OF ASSI  | less an assignee is ident<br>h in 37 CFR 3.11. Comp<br>GNEE   | ified below, no assignee<br>bletion of this form is NO     | data will appear on the T a substitute for filing a (B) RESIDENCE: (CIT  | patent. If an assign<br>n assignment.<br>TY and STATE OR   | COUNT  | ΓRΥ)  | cument has been filed for  |
| Please check the appropr  | iate assignee category or   | categories (will not be pr                                 | rinted on the patent):   | ┛ Individual   □ C   | orporati   | ion or other private gro  | up entity Government   |
| 4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies |   |  | <ul> <li>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</li> <li>A check is enclosed.</li> <li>Payment by credit card. Form PTO-2038 is attached.</li> <li>The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).</li> </ul> |  |  |   |  |
|   | s SMALL ENTITY statu  | is. See 37 CFR 1.27.                                       | b. Applicant is no lo  |  |  |   |  |
| interest as shown by the  | records of the United Sta   | tes Patent and Trademark                                   | Office.  | i tile applicant, a reg  | istered .  | attorney of agent, of the   | e assignee or other party in   |
| Authorized Signature  |   |  |  | Date   |  |   |  |
| Typed or printed name   |   |  |  | _  |  |   |  |
| an application Confiden   | tiality is governed by 35 d application form to the ions for reducing this but irginia 22313-1450. DC | U.S.C. 122 and 37 CFR                                      | 1.14 This collection is e  | estimated to take 12.  | minutes  | s to complete including   | by the USPTO to process) gathering, preparing, and the you require to complete truent of Commerce, P.O. or Patents, P.O. Box 1450, |

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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| APPLICATION NO.                   | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.            | CONFIRMATION NO. |
|-----------------------------------|---------------|----------------------|--------------------------------|------------------|
| 10/603,251 06/25/2003             |               | Thomas J. Heller JR. | POU920020123US1 3683           |                  |
| 75                                | 90 09/18/2008 |                      | EXAM                           | INER             |
| Lynn L. Augspur                   | ger           |                      | PARIKH,                        | KALPIT           |
| IBM Corporation                   |               |                      | ART UNIT                       | PAPER NUMBER     |
| 2455 South Road, Poughkeepsie, NY |               |                      | 2187<br>DATE MAILED: 09/18/200 |                  |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 749 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 749 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

|  |  | 1   |        |
|--|--|---|--------|
|  | Application No.  | Applicant(s)  |        |
| Al-d'PAH   | 10/603,251   | HELLER ET AL.   |        |
| Notice of Allowability   | Examiner   | Art Unit  |        |
|  | KALPIT PARIKH  | 2187  |        |
| The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI   | (OR REMAINS) CLOSED in or other appropriate community. This application is s | n this application. If not included unication will be mailed in due cours |        |
| 1. This communication is responsive to 11 June 2008.   |  |   |        |
| 2. The allowed claim(s) is/are 1-15,17-20 (renumbered 1-19).   |  |   |        |
| <ol> <li>Acknowledgment is made of a claim for foreign priority ur</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> <li>2. Certified copies of the priority documents have</li> <li>3. Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ol> | been received. been received in Application                                  | n No  | om the |
| * Certified copies not received:   |  |   |        |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4.  A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give  | IENT of this application. itted. Note the attached EXA                       | AMINER'S AMENDMENT or NOTIC   |        |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") mus   | st he submitted  |   |        |
| (a) ☐ including changes required by the Notice of Draftspers   |  | v ( PTO-948) attached   |        |
| 1) hereto or 2) to Paper No./Mail Date   | -  | ,   |        |
| (b) ☐ including changes required by the attached Examiner's  Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the   | s Amendment / Comment or   | ne drawings in the front (not the back)                                   | of     |
| 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT  | sit of BIOLOGICAL MATI   | ERIAL must be submitted. Note the   | ne     |
|  |  |   |        |
| Attachment(s)  | 5 <b></b> - 1 - 1 - 1  |   |        |
| 1. Notice of References Cited (PTO-892)  | $\equiv$   | formal Patent Application   |        |
| <ol> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statements (PTO/SB/08),</li> </ol>  | Paper No.  | ummary (PTO-413),<br>Mail Date<br>Amendment/Comment                       |        |
| Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit of Biological Material   | 8. 🛛 Examiner's  | Statement of Reasons for Allowanc   | е      |
|  | 9.   | <u>-</u> ·  |        |
|  |  |   |        |



Application No.

Application/Control Number: 10/603,251

Art Unit: 2187

### **DETAILED ACTION**

The instant detailed action is in response to Applicant's submission filed on 11 June 2008.

# I. APPLICATION INFORMATION

Application No. 10603251 has a total of 19 claims pending in the application; there are 2 independent claims and 17 dependent claims, all of which are ready for examination by the examiner.

## II. CHANGES MADE IN THE APPLICATION:

Claims 1-15, 17-20 have been renumbered as follows:

| Old Claim Numbering | New claim numbering |
|---------------------|---------------------|
| 1                   | 1                   |
| 2                   | 2                   |
| 3                   | 3                   |
| 4                   | 4                   |
| 5                   | 5                   |
| 6                   | 6                   |
| 7                   | 7                   |
| 8                   | 8                   |
| 9                   | 9                   |
| 10                  | 10                  |
| 11                  | 11                  |
| 12                  | 12                  |
| 13                  | 13                  |

Application/Control Number: 10/603,251

Art Unit: 2187

| 14             | 14 |
|----------------|----|
| 15             | 15 |
| 16 (Cancelled) |    |
| 17             | 16 |
| 18             | 17 |
| 19             | 18 |
| 20             | 19 |
|                |    |

The claims will <u>hereafter be referred to with their new claim number</u> for the remainder of the instant detailed office action.

#### III. ALLOWABLE SUBJECT MATTER

The following is an Examiner's Statement of Reasons for Allowance: the prior art made of record, including US PG PUB No. 20030018739, US Pat No. 5781757, fail to teach the combination including the limitations of:

(Claim 1): "...wherein a control program for the dispatch of virtual processors for controlling the size and extent of a required coherency domain changes said coherency boundaries directly with said coherency mode bits."

(Claim 16): "...wherein a control program for the dispatch of virtual processors for controlling the size and extent of a required coherency domain changes said coherency boundaries directly with said coherency mode bits."

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IV. RESPONSE TO ARGUMENTS

Applicants' arguments filed 11 June 2008 have been carefully and fully considered and are persuasive.

As noted supra the case is in condition for allowance.

V. CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be

directed to KALPIT PARIKH whose telephone number is (571)270-1173. The examiner can normally be reached

on MON THROUGH FRI 7:30 TO 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin L. Ellis

can be reached on (571) 272-4205. The fax phone number for the organization where this application or

proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information

Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR

or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to

the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated information system,

call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KLE/KP /KP/

9 September 2008

/Kevin L Ellis/

Acting SPE of Art Unit 2187

Application/Control Number: 10/603,251

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